MARCH 17
1953

Volume XXII Number 11

As I see

ACCRUED DEPRECIATION

ACCRUED depreciation is described as "the difference between the cost of replacement new as of the date of the appraisal, and the present appraised value." [1] Accepting this definition, it becomes relatively simple to determine depreciation rates if a sufficiently large number of appraisals is available.

With this in mind, I have gone to the appraisal file of the local appraisals made by our company during the past few years, and in each case we have compared the appraised value with the replacement cost new at the time of the appraisal, and have expressed the appraised price as a percentage of the replacement cost new of the entire property. In this study we have considered only single-family residences. The map at the top of the following page shows the distribution of the appraisals made by Roy Wenzlick & Co. in St. Louis and St. Louis County which we used as a base in this depreciation study. The large number of these appraisals and their wide distribution should prove to be a sufficient sample from which valid conclusions could be drawn.

I had a number of questions that I wanted this study to answer. These questions had to do with the following:

1. Has this loss in value of existing properties, which is generally referred to as accrued depreciation, accumulated at a regular rate during the life of the property? In other words, have we had "straight line depreciation"?

2. Has the loss in value, generally referred to as accrued depreciation, been less if computed at a time when a housing shortage existed and, if so, how much variation was there in comparison with periods in which a housing surplus existed?

3. How much variation has there been between the appraised values of these properties and actual selling price?

4. In view of these studies, and taking into consideration the general real estate situation as it exists today, what would an average rate of depreciation amount to and how much accrued depreciation should be estimated on the average property of any given age?

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[1] Appraisal Terminology and Handbook. American Institute of Real Estate Appraisers.

APPRAISALS MADE IN GREATER ST. LOUIS

EVERY DOT ON THIS MAP REPRESENTS AN INDIVIDUAL APPRAISAL BY ROY WENZLICK & CO

Let us now take up these subjects in order, and see what we might learn from this record of actual appraisals.

1. Straight line depreciation. On appraisals made between August 1949 and February 1953, we found that the loss in value in comparison with the replacement cost new of the entire property did approximate a straight line during the first 35 years of the life of the property. In other words, on the average, a property 5 years old was appraised at 94% of its replacement cost new, or a loss of 6% in value. A property 10 years old was appraised, on the average, for 88% of its replacement cost new, or a loss in 10 years of 12% of its value. At the end of 15 years, the appraised value was 82% of the replacement cost new; at the end of 20 years, it was 76%; at the end of 25 years, it was 70% of its replacement cost new; 30 years averaged 65%; and 35 years averaged 59%. On the 35-year basis this would indicate a loss in value of 41%, or approximately 1.2% per year.

It must constantly be remembered, however, that the replacement cost new used in this study included the replacement cost of the ground as well as of the building, and it is generally assumed that the ground does not depreciate in value. (I am not at all certain that I can give an unqualified agreement to this general belief.[2]) At the end of 50 years, our chart would indicate that the appraised value

[2] See March 1951 Appraisal Bulletin.

will average 42% of the replacement cost new; at the end of 60 years, it will average 33%; at the end of 70 years, it will average 26%; and at the end of 75 years, it will average 23%. It will be noticed that by the time the property is 75 years old, the accrued depreciation has averaged just about 1% per year.

The slower rate of depreciation in the older properties is partially due, of course, to the fact that the ground is losing a smaller percentage of its value than the building, as the ground does not disappear and decreases in value only as the neighborhood deteriorates. It is also due to the fact that a building which has reached an age of 50 to 75 years has already weathered many of the depreciating influences and, like an individual of a similar age, having successfully lived through the diseases of childhood and middle age, has a probability of reaching an age far in excess of the average life expectancy of all males at birth.[3]

2. Depreciation in scarcity and in surplus periods. The housing scarcity was at its peak in the period from 1944 to 1946 and, accordingly, we have compared this period with the period from 1934 to 1936 when a large surplus of housing existed. As would be expected, the depreciation shown on the depression figures greatly exceeded the depreciation shown in the boom period. For instance, a property 5 years old was appraised at 94% of its replacement cost new during the housing shortage and at 84% during the depression period. A property 10 years old was appraised at 88% in a scarcity period and at 77% in the heavy vacancy period. At the end of 20 years the property appraised during the housing shortage had an appraised value of 75% of its replacement cost new, while the average appraisals made in the depression period on properties 20 years old averaged 68% of replacement cost new; 30-year-old properties averaged 66% of replacement cost new in the scarcity period, 60% in the depression period; and 40-year-old properties ran 49% of replacement cost new in a scarcity period and 37% in the depression period.

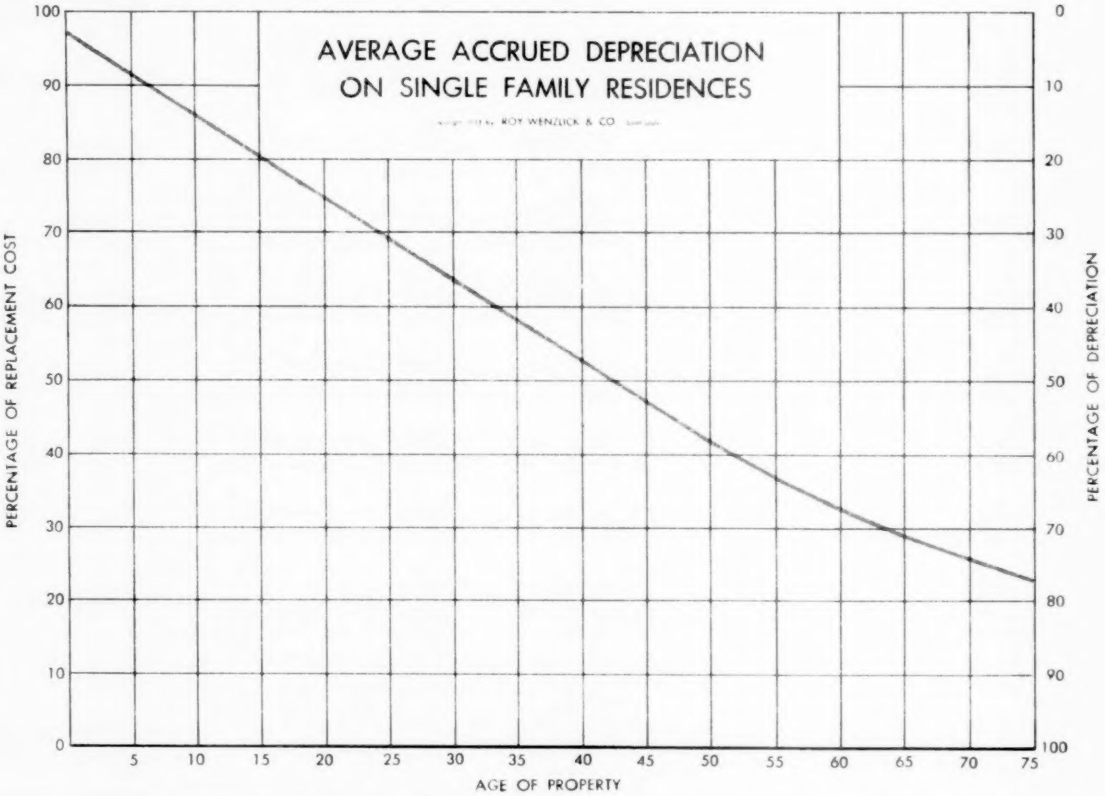
In other words, it seems that the amount which a property is assumed to be worth carries a greater deduction for depreciation during housing surplus periods than the deduction generally experienced during housing shortage periods.

3. The variation between appraised values and the public's opinion of value as indicated by selling prices. For many years we have been posting actual sales to our appraisal file, and on many appraisals which we have made we have actual sales recorded at approximately the time of the appraisal. A charting of the public's idea of value in contrast with the appraiser's idea indicates that in a boom period the public seems to be willing to pay a far larger percentage of replacement cost new than the appraiser thinks justified. In the period of extreme shortage in 1944 to 1946, the average selling price posted to our file on buildings 5 years old averaged 109% of replacement cost new. Buildings 10 years old aver-

[3] See chart "Average Remaining Life for Residential Buildings at Any Given Age," page 20, January 1953 Appraisal Bulletin.

aged 98%; 15 years old, 89%; 30-year-old buildings were still averaging 80% of replacement cost new; 40-year-old buildings, 63%; and 50-year-old buildings, 53%. In 1934 to 1936, there were relatively few sales, but those sales records which we were able to post to our appraisal file indicated an opinion of value on the part of the public below the opinion of the appraiser. In the period from 1940 to 1943, we found that the charted figures on the percentage of selling price to replacement cost new and of appraised value to replacement cost new were almost identical. In other words, this was a period of balance in the market, when the surplus dwelling units had been largely absorbed, but before the real scarcity developed.

4. In view of the studies we have made, it would seem to us that in today's market, appraised value can be estimated on the average at the following percentages of replacement cost:



I am not implying in any way that all that is necessary in order to arrive at a correct appraisal on a single-family residence is to figure replacement cost new, secure the age and apply the foregoing percentages in order to determine its value, but I do think that if a sufficiently large number of appraisals are averaged out, results somewhat similar to those we have indicated will be secured.

Roy Wenzlick

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